

Amendments To The Claims

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended). An optical deflection device for diverting the direction of light rays comprising:

a plurality of deflecting elements comprising a first pair of deflecting elements and a second pair of deflecting elements, where each deflecting element comprises an electro-optical material and is defined by two electrodes of similar shape on opposite sides of said electro-optical material, such that the index of refraction of said electro-optical material is controllably adjustable by applying a voltage difference to said electrodes,

where each pair of deflecting elements has a generally longitudinal axis and the axis of said first pair of deflecting elements and the axis of said second pair of deflecting elements are in a tilted relationship.

Claim 2 (original). The optical deflection device of claim 1, wherein adjacent surfaces of said first pair of deflecting elements are planar and parallel, and wherein adjacent surfaces of said second pair of deflecting elements are planar surfaces and parallel.

Claim 3 (original). The optical deflection device of claim 2, wherein adjacent surfaces between said first pair of deflecting elements and said second pair of deflecting elements are planar and parallel.

Claim 4 (original). The optical deflection device of claim 1, wherein said electrodes are

triangular.

Claim 5 (original). The optical deflection device of claim 1, wherein the edges of each electrode are straight.

Claim 6 (original). The optical deflection device of claim 1, wherein at least one edge of at least one electrode is curved.

Claim 7 (original). The optical deflection device of claim 1, wherein said electro-optical material is PZT, PLZT, or LN.

Claim 8 (original). The optical deflection device of claim 1, wherein said first pair of deflecting elements and said second pair of deflecting elements have the same shape.

Claim 9 (original). The optical deflection device of claim 2, wherein adjacent surfaces between said first pair of deflecting elements and said second pair of deflecting elements are planar and parallel, and wherein said first pair of deflecting elements and said second pair of deflecting elements have the same shape.

Claim 10 (currently amended). An optical switching module comprising:

an input side having one or more input channels each adapted to accept an optical input;

an output side having a plurality of output channels each adapted to deliver an optical output; and

a common waveguide disposed between said input side and said output side,
where at least one input channel comprises a plurality of deflecting elements comprising a first pair of deflecting elements and a second pair of deflecting elements, said pairs of deflecting elements having first and second generally longitudinal axes, respectively, and wherein said first and second axes are in a tilted relationship.

Claim 11 (original). The optical switching module of claim 10, wherein each deflecting element comprises an electro-optical material and is defined by two electrodes of similar shape on opposite sides of said electro-optical material, such that the index of refraction of said electro-optical material is controllably adjustable by applying a voltage difference to said electrodes.

Claim 12 (original). The optical switching module of claim 10, wherein adjacent surfaces of said first pair of deflecting elements are planar and parallel, and wherein adjacent surfaces of said second pair of deflecting elements are planar surfaces and parallel.

Claim 13 (original). The optical switching module of claim 12, wherein adjacent surfaces between said first pair of deflecting elements and said second pair of deflecting elements are planar and parallel.

Claim 14 (original). The optical switching module of claim 11, wherein said electrodes are triangular.

Claim 15 (original). The optical switching module of claim 11, wherein the edges of each

electrode are straight.

Claim 16 (original). The optical switching module of claim 11, wherein at least one edge of at least one electrode is curved.

Claim 17 (currently amended). The optical switching module of claim 11 ~~[[10]]~~, wherein said electro-optical material is PZT, PLZT, or LN.

Claim 18 (original). The optical switching module of claim 10, wherein said first pair of deflecting elements and said second pair of deflecting elements have the same shape.

Claim 19 (original). The optical switching module of claim 12, wherein adjacent surfaces between said first pair of deflecting elements and said second pair of deflecting elements are planar and parallel, and wherein said first pair of deflecting elements and said second pair of deflecting elements have the same shape.

Claim 20 (original). The optical switching module of claim 10, wherein the refractive index of said common waveguide is less than the refractive index of said input side and the refractive index of said output side.

Claim 21 (currently amended). A method for deflecting light beams in an optical switching module having an input side with one or more input channels each adapted to accept an optical input, an output side with a plurality of output channels each adapted to deliver an optical output,

and a common waveguide disposed between said input side and said output side, where at least one input channel comprises a plurality of deflecting elements comprising a first pair of deflecting elements having a first generally longitudinal axis and a second pair of deflecting elements having a second generally longitudinal axis, where said first and second axes are in a tilted relationship, said method comprising:

controlling the deflection of a light beam at said input side from a selected input channel to a selected output channel by applying different voltages to said first pair of deflecting elements and said second pair of deflecting elements.

Claim 22 (original). The method of claim 21, wherein said controlling further includes applying a voltage to said first pair of deflecting elements to deflect a selected input to one of approximately two thirds of said plurality of optical channels

Claim 23 (original). The method of claim 22, wherein said controlling further includes applying a voltage to said first pair of deflecting elements and to said second pair of deflecting elements to deflect a selected input to one of approximately one third of said plurality of optical channels.

Claim 24 (original). The method of claim 21, wherein at least one output channel comprises a plurality of deflecting elements comprising a third pair of deflecting elements and a fourth pair of deflecting elements in a tilted relationship, said method further comprising:

controlling the deflection of a light beam at said output side from a selected input channel to a selected output channel by applying different voltages to said third pair of deflecting elements and said fourth pair of deflecting elements.

Claim 25 (original). The method of claim 24, wherein said controlling the deflection at said output side further includes applying a voltage to said third pair of deflecting elements to deflect a selected input to one of approximately two thirds of said plurality of optical channels

Claim 26 (original). The method of claim 25, wherein said controlling the deflection at said output side further includes applying a voltage to said third pair of deflecting elements and to said fourth pair of deflecting elements to deflect a selected input to one of approximately one third of said plurality of optical channels.

Claim 27 (new). An optical deflection device for diverting the direction of light rays in a controllable light path through a slab of electro-optical material comprising:

a plurality of deflecting electrodes mounted on said slab comprising a first deflecting electrode adjacent to a first position in a light path and a second deflecting electrode adjacent to a second position in said light path, said first and second electrodes being separately coupled to an adjustable electrical potential to cause deflection of said light rays;

wherein each of said first and second deflecting electrodes has a generally longitudinal axis and wherein the axis of said first deflecting electrode and the axis of said second deflecting electrode are in a tilted relationship.